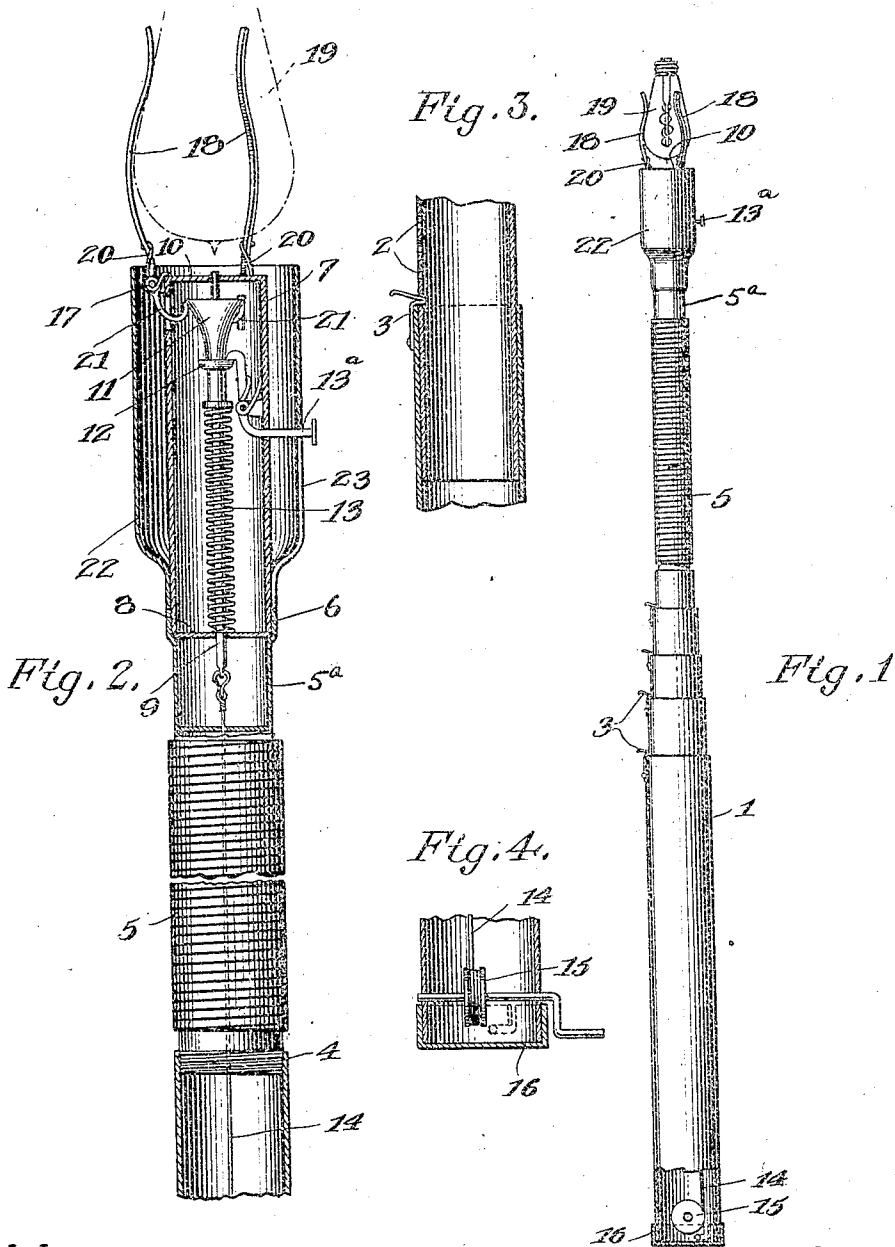


R. H. BERKSTRESSER.
 INCANDESCENT LAMP MANIPULATOR.
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Patented Nov. 29, 1910.



WITNESSES:

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ROBERT H. BERKSTRESSER, OF YORK, PENNSYLVANIA.

INCANDESCENT-LAMP MANIPULATOR.

977,158.

Specification of Letters Patent. Patented Nov. 29, 1910.

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To all whom it may concern:

Be it known that I, ROBERT H. BERKSTRESSER, citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Incandescent-Lamp Manipulators, of which the following is a specification.

My invention relates to incandescent lamp manipulators.

The present invention relates to that class of devices which are intended for removing incandescent lamp bulbs from their sockets or replacing them therein and seeks to provide a device of the character set forth which will be of simple, light, durable, and inexpensive construction, whose handle will be adapted to be extended to different lengths, which can be arranged with its gripping fingers housed or protected when not in use, will have improved means for automatically operating the gripping fingers, and will be so constructed that it may be readily carried about.

Other objects of the invention will more fully appear from the following description wherein the construction is set forth in detail, and the appended claims recite the novel features.

In the accompanying drawings: Figure 1 is an elevation of the device when the handle is in extended condition. Fig. 2, an enlarged view, showing the head in section; Fig. 3, a sectional detail showing one of the catches; and Fig. 4, a similar view showing the windlass.

The handle is preferably composed of a plurality of tubular telescoping sections 1 which are provided with series of openings 2 (Fig. 3) and snap catches 3 to engage them, whereby the sections may be extended or telescoped to different degrees and secured where positioned. Thus, the handle may be arranged in compact form for transportation or may be extended as desired, according to the height of the lamp which is to be manipulated. Screwed into the uppermost section 1, as at 4, Fig. 2, is preferably provided a section 5 composed of superposed flexible spirals, enabling the handle to be flexed to any desired extent throughout the length of the section 5. Suitably fixed in the upper end of section 5 is a short tubular section 5*, and in the upper end of this section there is screwed at 6 a tubular container 7, a disk 8 being held

thereby at the joint thereof. Slidable through a central opening in the disk is a stem 9 whose upper end 10 slides through an aperture in the end of the container 7, whereby the stem 9 is guided in its movements. Said stem carries a spreader 11 of substantially inverted conical form having a head or shoulder 12. A coiled spring 13 surrounds the stem 9 between the end of the spreader and the disk 8 and tends to force the spreader upwardly. Such action may be restrained by a spring actuated push button catch 13*. The stem 9 and its spreader 11 may be drawn downwardly against the tendency of the spring 13 to raise the same by a cord 14 which winds upon a windlass 15, Fig. 4. The end of the lowermost section 1 may be closed by a cap 16 having a suitable bayonet joint in connection therewith.

Other means than the windlass and cord may be used for retracting the stem.

Journalled in brackets at 17 on the outside of the container 7 are gripping fingers 18 which are suitably formed so that they will be adapted to grasp the incandescent lamp bulb 19 without injury thereto. These fingers are adapted to automatically open by reason of the provision of springs 20 but the fingers are provided with extensions 21 which are adapted to play through slides in the side of the container 7 in position for cooperation with the spreader 11.

At 22 there is shown a tubular housing whose lower part fits and is adapted to slide upon the container 7. This housing, for the greater part of its length, is sufficiently large so that when it is drawn upwardly the fingers 18 will be closed therein, whereby the fingers may be readily covered and protected against injury when the device is not in use. To permit this sliding movement, I provide the housing with a slot 23 in which the shank catch 13 is received.

When it is desired to remove a lamp, the catch 13 is depressed to release the spreader 11 so that the fingers 18 will be spread by their springs 20. The device is then manipulated to position the fingers 18 around the lamp 19, whereupon the operator turns the windlass 15 which causes the stem 9 to be drawn downwardly and the spreader 11 to press upon and spread the extensions 21, causing the fingers 18 to grip the lamp, the head 12 immediately snapping past catch 13 so that the latter holds the fingers firmly

grasping the lamp 19 which may then be manipulated as desired. On depressing the catch 13, the fingers will automatically release themselves from the lamp.

5 I am aware that many changes could be resorted to in carrying out the invention and therefore do not limit myself to the specific construction herein set forth.

10 Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

15 1. In an incandescent lamp manipulator, the combination of a tubular handle, lamp-grasping fingers pivoted to the upper portion thereof and having extensions disposed below their pivots and in the tubular handle, yielding means on the handle for throwing the fingers outward and the depending extensions thereof inward, a cone-shaped spreader disposed and movable endwise between said extensions, means for operating said spreader, connected therewith and extending to a point adjacent the lower end of the handle and adjustable housing for said fingers.

20 2. In an incandescent lamp manipulator, the combination of a tubular handle, lamp-grasping fingers pivoted to the upper portion thereof and having extensions disposed below their pivots and in the tubular handle, yielding means on the handle for throwing the fingers outward and the depending extensions thereof inward, a spreader, of inverted cone shaped, disposed and movable endwise between said extensions and having a stem guided in the handle and also having a beveled shoulder, an abutment in the handle, an expansion spring interposed between the spreader and said abutment, retracting means connected to the lower end of the

spreader stem and extending to a point adjacent the lower end of the handle, and a spring-pressed catch mounted in the handle and adapted to engage and hold the beveled shoulder of the spreader when the latter is retracted.

3. In an incandescent lamp manipulator, the combination with a container, of movable fingers carried thereby which are adapted for grasping the lamp, and an adjustable housing for said fingers.

4. In an incandescent lamp manipulator, the combination with a container, of movable fingers carried thereby which are adapted for grasping the lamp, and a housing for said fingers, said housing and fingers being adapted for relative movement to cause the fingers to be contained within the housing or located outside of it.

5. In an incandescent lamp manipulator, the combination with a container, of movable fingers carried thereby, and a housing slidable on said container and adapted to receive the fingers.

6. In an incandescent lamp manipulator, the combination with a container, of lamp grasping fingers pivoted thereto, and a movable spreader located within the container and cooperating with said fingers, and a spring adapted to shift said spreader a releasable catch adapted to engage the spreader and hold it against the action of the spring and adjustable housing for said fingers.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT H. BERKSTRESSER.

Witnesses:

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JACOB E. WEAVER.